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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/122,293	07/24/1998	MASAHIKO SAKAYORI	1232-4457	4239
27123	7590	07/06/2006	EXAMINER	
MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101			MEINECKE DIAZ, SUSANNA M	
			ART UNIT	PAPER NUMBER
			3623	

DATE MAILED: 07/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/122,293		SAKAYORI ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Susanna M. Diaz		3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,11 and 21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,11 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 10, 2006 has been entered.

Claims 1 and 21 have been amended.

Claims 2, 7-10, 12-20, and 22-49 stand as cancelled.

Claims 1, 3-6, 11, and 21 are pending.

2. The previously pending rejections under 35 U.S.C. § 112, 2<sup>nd</sup> paragraph are withdrawn in response to Applicant's claim amendments; however, a new one is applied in response to the claim amendments.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 21 recites the limitation "wherein the pre-determined minimum order number is the minimum number of parts purchased decided in advance between an ordering side and delivery side owing to limitations defined by a number of packages." It is not clear how the minimum number of parts purchased relates to the expansion of the order into component parts, if at all. If the expansion of parts is based on a set requirement of component parts to manufacture an ordered product, then how can a minimum number of parts be decided in advance based on limitations defined by a number of packages? Also, what is meant by "limitations defined by a number of packages"? Are these the packages that components are shipped in or packages in which the final ordered products are shipped? Also, if the minimum number of parts purchased is decided in advance between an ordering and delivery side, is this minimum number set contractually or it is based on firm manufacturing requirements for building an ordered product? If decided contractually, is the establishment of the contract meant to be expressly recited as part of the invention or is it outside of the claimed scope of invention since it is decided in advance?

Appropriate correction and/or clarification is required.

*Because claim 21 is so indefinite, no art rejection is warranted as substantial guesswork would be involved in determining the scope and content of this claim; however, it should be noted that claim 21 is substantially similar in scope to claim 1, which has been rejected. See In re Steele, 305 F.2d 859, 134 USPQ 292 (CCPA 1962); Ex parte Brummer, 12 USPQ 2d, 1653, 1655 (BdPatApp&Int 1989); and also In*

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*re Wilson, 424 F.2d 1382, 165 USPQ 494 (CCPA 1970). Prior art pertinent to the disclosed invention is nevertheless cited and applicants are reminded they must consider all cited art under Rule 111(c) when amending the claims to conform with 35 U.S.C. 112.*

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 5, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Dietrich et al. (U.S. Patent No. 5,216,593).

Dietrich discloses a parts ordering system comprising:

[Claim 1] a first domain, a second domain and a third domain connected in a tree structure, each domain being a unit of processing in a computer system corresponding to a working unit on a production line (col. 19, lines 1-27, 57-62 -- The approved orders are ultimately released to the shop floor to be produced. The various domains are linked together and therefore can be interpreted as connected in a tree structure just as all the branches of a tree are somehow connected to one another),

wherein the first domain includes ordering means for transferring an order to the second domain (col. 19, lines 1-2, 5-6 -- The first domain is the "order entry/tracking

means," which sends order information to the "bill of material explosion means," which is part of the second domain),

wherein the second domain (col. 19, lines 5-27) includes:

receiving means for receiving an order from the first domain, the received order being an order for a part of a product to be produced by the production line (col. 19, lines 1-2, 5-6 -- The first domain is the "order entry/tracking means," which sends order information to the "bill of material explosion means," which is part of the second domain);

judging means for judging a kind of the order (col. 19, lines 14-27 -- The inventory sensor means, shop floor sensor means, and profit analyzer means are used in conjunction with the data preprocessing means to evaluate various characteristics of the order);

machining planning means for devising a machining plan based upon the judged order (col. 19, lines 14-27 -- The inventory sensor means, shop floor sensor means, and profit analyzer means are used in conjunction with the data preprocessing means to evaluate various characteristics of the order. Based on these characteristics, it is determined whether or not the order will be produced);

expanding means for expanding, into each component part, a part corresponding to the order in accordance with the machining plan (col. 6, line 64 through col. 7, line 14; col. 19, lines 5-13);

order planning means for generating parts order information to be orders placed based on each component part information expanded by said expanding means and a

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pre-determined minimum order number data of each component part to be required to produce the product stored in a database (col. 6, line 64 through col. 7, line 28; col. 7, lines 61-66 -- An order is broken down into a bill of materials. Some orders are rejected, e.g., if there is insufficient inventory. In order to assess a sufficiency or insufficiency of inventory based on an exploded bill of materials, it must be understood how many of each component part is required to produce the product. The parts order information refers to the components that would necessarily need to be pulled from inventory to produce the product), and

communication means for communicating the parts order information generated by said order planning means to the third domain (col. 19, lines 57-62 -- Approved orders are released to the floor control means, which sends the order to the shop floor for production),

wherein the third domain includes parts order information receiving means for receiving the parts order information from the second domain (col. 19, lines 57-62 -- Approved orders are released to the floor control means, which sends the order to the shop floor for production);

[Claim 5] wherein said expanding means of the second domain has means for performing expansion in units of individual parts constructing a manufactured product based upon a received order, and means for calculating the number of parts (col. 6, line 64 through col. 7, line 14; col. 19, lines 5-13);

[Claim 6] wherein said order planning means of the second domain has means for comparing a number of parts contained in inventory and a number of parts required,

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and means for calculating minimum units of an order based upon results of the comparison (col. 6, line 64 through col. 7, line 28; col. 7, lines 61-66 -- An order is broken down into a bill of materials. Some orders are rejected, e.g., if there is insufficient inventory. In order to assess a sufficiency or insufficiency of inventory based on an exploded bill of materials, it must be understood how many of each component part is required to produce the product).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dietrich et al. (U.S. Patent No. 5,216,593), as applied to claim 1 above.

[Claim 3] Dietrich allows sales managers to maintain order status information in a database (col. 6, lines 57-63), yet Dietrich does not expressly teach that said receiving means of the second domain has means for making a comparison with data, which has been retained in a database, to determine whether an order is a new order, a modified order or re-transmission of the same order. Dietrich's sales managers have the ability to update this type of order information; however, Dietrich's second domain does not utilize such data for making a comparison with data, which has been retained in a database, to determine whether an order is a new order, a modified order or re-



transmission of the same order. Official Notice is taken that it is old and well-known in the art of order management to monitor whether orders are new orders, modified orders, or re-transmissions of the same order. These procedures are used to enable alterations to order requests while facilitating that revised orders get reinserted into the proper stage of the order/manufacturing cycle. For example, if a customer decides to revise an existing order, the order/manufacturing system should not generate a completely new order. Otherwise, an excessive number of products might be manufactured. Instead, the existing order should be modified without creating a duplicate order. Consequently, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Dietrich such that Dietrich's receiving means of the second domain has means for making a comparison with data, which has been retained in a database, to determine whether an order is a new order, a modified order or re-transmission of the same order in order to facilitate order revisions without generating duplicate orders that would otherwise lead to overproduction of undesired products.

Dietrich discloses a parts ordering system comprising:

[Claim 11 (dependent from claim 1)]      a first domain, a second domain and a third domain connected in a tree structure, each domain being a unit of processing in a computer system corresponding to a working unit on a production line (col. 19, lines 1-27, 57-62 -- The approved orders are ultimately released to the shop floor to be produced. The various domains are linked together and therefore can be interpreted as

connected in a tree structure just as all the branches of a tree are somehow connected to one another),

wherein the first domain includes ordering means for transferring an order to the second domain (col. 19, lines 1-2, 5-6 -- The first domain is the "order entry/tracking means," which sends order information to the "bill of material explosion means," which is part of the second domain),

wherein the second domain (col. 19, lines 5-27) includes:

receiving means for receiving an order from the first domain, the received order being an order for a part of a product to be produced by the production line (col. 19, lines 1-2, 5-6 -- The first domain is the "order entry/tracking means," which sends order information to the "bill of material explosion means," which is part of the second domain);

judging means for judging a kind of the order (col. 19, lines 14-27 -- The inventory sensor means, shop floor sensor means, and profit analyzer means are used in conjunction with the data preprocessing means to evaluate various characteristics of the order);

machining planning means for devising a machining plan based upon the judged order (col. 19, lines 14-27 -- The inventory sensor means, shop floor sensor means, and profit analyzer means are used in conjunction with the data preprocessing means to evaluate various characteristics of the order. Based on these characteristics, it is determined whether or not the order will be produced);

expanding means for expanding, into each component part, a part corresponding to the order in accordance with the machining plan (col. 6, line 64 through col. 7, line 14; col. 19, lines 5-13);

order planning means for generating parts order information to be orders placed based on each component part information expanded by said expanding means and a pre-determined minimum order number data of each component part to be required to produce the product stored in a database (col. 6, line 64 through col. 7, line 28; col. 7, lines 61-66 -- An order is broken down into a bill of materials. Some orders are rejected, e.g., if there is insufficient inventory. In order to assess a sufficiency or insufficiency of inventory based on an exploded bill of materials, it must be understood how many of each component part is required to produce the product. The parts order information refers to the components that would necessarily need to be pulled from inventory to produce the product), and

communication means for communicating the parts order information generated by said order planning means to the third domain (col. 19, lines 57-62 -- Approved orders are released to the floor control means, which sends the order to the shop floor for production),

wherein the third domain includes parts order information receiving means for receiving the parts order information from the second domain (col. 19, lines 57-62 -- Approved orders are released to the floor control means, which sends the order to the shop floor for production).

Dietrich's third domain includes the floor control means, which sends the order to the shop floor for production (col. 19, lines 57-62); however, Dietrich does not expressly teach that the third domain could be a means for receiving an external order for component parts to replenish inventory, for example. However, Official Notice is taken that it is old and well-known in the art of manufacturing to place orders for components that are needed to manufacture a product. This procedure is required to replenish inventories, as needed. Therefore, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Dietrich such that it incorporate a third domain for accepting parts order information for components needed to build a final product in order to facilitate more rapid replenishment of inventory, as needed. While Dietrich does not expressly disclose that its second domain further comprises "stopping means for comparing the amount of specific parts contained in inventory stored in the database and a required amount of specific parts obtained by said expanding means, and stopping the communication of a parts order to the third domain in a case where the amount of specific parts contained in inventory is greater, by a prescribed amount, than the required amount of specific parts," Dietrich does check internal inventory to make sure that required component parts are available (col. 7, lines 57-66). When sufficient component parts are available in inventory, an order may be approved and sent to the shop floor in Dietrich; therefore, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Dietrich's second domain to further comprise "stopping means for comparing the amount of specific parts contained in

inventory stored in the database and a required amount of specific parts obtained by said expanding means, and stopping the communication of a parts order to the third domain in a case where the amount of specific parts contained in inventory is greater, by a prescribed amount, than the required amount of specific parts" in order to eliminate the placement of unnecessary orders when a required number of component parts are in stock.

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dietrich et al. (U.S. Patent No. 5,216,593), as applied to claim 1 above, in view of Yamada (U.S. Patent No. 5,796,614).

[Claim 4] Dietrich discloses that approved orders are actively sent to the shop floor to be produced (col. 19, lines 57-62), yet Dietrich does not expressly teach how production dates are scheduled. Yamada makes up for this deficiency in its teaching of a composite calendar calculations means that uses a leadtime and a due date to plan a manufacturing schedule, or MRP calendar (Fig. 7; col. 10, lines 39-45). Similar to Dietrich, Yamada is directed toward a level-by-level explosion method for material requirements planning (abstract); therefore, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Dietrich such that Dietrich's machining planning means of the second domain has means for comparing a designated delivery date of a received order and planned production date retained in a database, and means for scheduling an expected production date based upon results of the comparison in order to more efficiently obtain

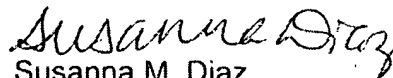
a variety of parts (from an exploded bill of materials) in a shorter period of time, as suggested by Yamada (col. 4, lines 16-23).

***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susanna M. Diaz whose telephone number is (571) 272-6733. The examiner can normally be reached on Monday-Friday, 10 am - 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Susanna M. Diaz  
Primary Examiner  
Art Unit 3623

June 23, 2006